DOCUMENT RESUME

ED 188 262 CS 502 951

AUTHOR Lewis, Michael L.; And Others
TITLE Communication Roles as Indicators of Management Preference: An Integrative Approach to the Study of Communication in Organizations.
PUB DATE May 80
NOTE 40p.; Paper presented at the Annual Meeting of the International Communication Association (Acapulco, Mexico, May 18-23, 1980).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adults; Group Dynamics; *Interaction Process Analysis; *Organizational Communication; Organizations (Groups); *Participation; Predictive Validity; Reliability; *Research Methodology; *Role Perception; *Role Theory
IDENTIFIERS *Communication Research

ABSTRACT

The Communication Role Assessment Measure (CRAM) is an application of role theory to organizational communication. Using a communication-based taxonomy, CRAM was developed to integrate previous research in the field and to assess the following elements: the amount of time spent by members of an organization in selected communication roles; their self-perceptions of their involvement, skill, trust, and comfort while in each communication role; and the amount of time spent interacting with superiors, subordinates, and peers. The six classes of communication roles in the CRAM taxonomy are source/receiver, work/person, information exchange, solution seeking, negotiation, and behavior change. Data on the reliability and validity of the CRAM taxonomy were collected in a study of National Guard personnel, extending the schema to assess predictive validity for management style preference. The results showed reliability estimates ranging from .45 to .997, with validity of factor structure representations ranging from .57 to .99. Measures of predictive validity showed that 11 factor variables significantly predicted preference for authoritarian management style, while 12 factor variables significantly predicted preference for interpersonal relations-oriented management style. (Author/RL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED188262

COMMUNICATION ROLES AS INDICATORS OF MANAGEMENT PREFERENCE: AN INTEGRATIVE APPROACH TO THE STUDY OF COMMUNICATION IN ORGANIZATIONS

By

Michael L. Lewis
University of Oklahoma

and

H. Wayland Cummings
University of Oklahoma

and

Larry W. Long
Illinois State University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Michael L. Lewis
H. Wayland Cummings
Larry W. Long

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A paper presented at the annual meeting of the International Communication Association, Aculpoco, 1980.

CS502251

THE DEVELOPMENT OF A COMMUNICATION ROLE
TAXONOMY AS PREDICTORS OF MANAGEMENT PREFERENCE

The process of managing is paramount to organizational life. Descriptions of how to manage vary widely from the authoritarian principles exemplified by Taylor, Fayol or Weber, to the human welfare principles representative of Likert, Herzberg or Emery and Trist.[1] It is important to note upon surveying the history of management thought that communication activities hold critical defining characteristics for management styles among organizational scholars.[2] Few practitioners or organizational theorists discuss management styles without also suggesting certain communication behaviors that reflect the managerial relationships among members of an organization. Unfortunately, communication scholars are embarrassingly quiet in addressing questions of communication behavior and management styles in organizations.

Only rarely does the communication discipline discuss the communication implications of management styles. Occasionally, a dissertation effort includes comparisons between parts of certain management models and communication activities, like participative decision making, leadership styles, or managerial openness.[3] Discussions of organizational management styles by communication scholars in print are most rare.[4] What is said by communication scholars about management styles is often only a "side-bar" to the focus of their research. The near

absence of research about communication activities in management styles has lead some scholars to rhetorically ask, "Are organizational communication researchers alert...to the kinds of questions being raised by critics in the field of organizational theory?"[5]

There is under-whelming support for the position that purports communication scholars are alert to the importance of managing activities in organizations. Put simply, the communication discipline has undercontributed to the practical and theoretical activities of managing in organizations. Why? A major reason communication questions about management styles are seldom asked is due to the absence of a conceptual framework which permits such questions to be generated. The purpose of this claim is not to belittle all past organizational communication research, but to suggest the usefulness of past research is, in several ways, self-limiting. This article outlines an integrative conceptualization of communication in organizations, reports development of an instrument to assess activities, and discusses the implications of such assessment on managing.

Organizational Communication's "Tunnel Vision"

Several have indicted organizational communication research as tending to be a disconnected collection of studies existing like a series of conceptual islands seldom providing a practitioner a way to get from one island to another.[6] Indeed, the dangers of a jumping-from-study-to-study approach to communica-

tion is a discipline-wide charge.[7] However, the study of communication in organizations seems particularly to have lead to a fractionation rather than a coherent scientific explanation. Thus, under the banner of organizational communication research, one group of scholars studies communication as an effector of attitudes such as job satisfaction; another group studies communication as flow patterns between nodes; still another group studies communication in organizations as meaning transfer between two designated points.[8] This does not say there is no "truth value" in each group's orientation toward the study of communication in organizations; rather, it is to suggest that because researchers tend to formulate theoritic positions in isolation from the positions of others, the collective outcomes of this type of tunnel vision renders organizational communication research an appearance of confusion to outsiders trying to make sense of the discipline's work. It appears that organizational behaviorists are correct when they describe organizational communication research as "unsystematic, unorganized...a bunch of twaddle."[9]

What is the disciplines response to such a state of affairs? The fashionable response is to cry for more and better theories. Certainly the creative process of theory construction is continually in demand. However, if the ambition of the communication discipline is to merely generate more theory, what constraints prevent "more" theories from simply compounding the segmentation of organizational communication research? Commun-

ication scholars must affirm that creative theory construction not only provide a framework for asking new questions about new concepts but also it must allow for integration of past research, generating new questions about previous inquiry and enhancing usefulness of past research for both theorist and practitioner.

An Integrative Conceptualization of Communication

Integration requires first the identification of that which is basic and applicable in generalizing a field of concern. Among the orientations to human communication, one type of basic summary focus might be described as the disciplines' concern with the symbolic exchange as it occurs both within people and between people. One basic way of classifying orientations to communication is by degrees of emphasis on psychological and sociological concerns. For example, the study of communication with a psychological orientation might inquire about communication apprehension, communication as it impacts on an individual's perception of job morale, self persuasion, etc. Communication inquiry with a sociological orientation examines phenomena like credability, group structure, leadership skills, how decisions are made and disseminated through a collection of individuals, etc. The key question becomes: Is there an integrative framework that allows for both psychological and sociological concerns? Yes. One approach would be to conceptualize these properties together under the umbrella of role theory.

Rommetveit argued nearly a quarter of a century ago that the concept of role is the "Theoretical point of articulation between psychology and sociology. It is the largest possible research unit in the former and the smallest possible within the latter."[10]

Theorists commonly identify role taxonomies in terms of jobs a person holds in an organization, or the position one holds in a social structure such as in one's family. Psychologists commonly emphasize individual properties of actors who play certain roles, along with consequences on personal and social life. Conversely, sociologists often view roles as the smallest unit of social activity, emphasizing role relationships. Whatever one's theoretic commitment, roles are identified and described based on the substantive concern of the theorists.[11] Social structure may provide the role schema which concern the researcher. Or, social psychoanalytic concepts may generate the classification.[12] Until recently, no attempt has evolved among communication theorists to develop a comprehensive communication role taxonomy. Yet, communication roles may hold considerable promise as a mechanism of integrating traditional yet often disconnected communication concerns.

A Communication Role Taxonomy

When discussing roles, two major classes of questions emerge: (1) What are the properties of roles in communication which define social relationships, and (2) What are the psychological properties of actors who occupy those roles? A communication role taxonomy provides the beginning point for classify-

ing the "parts" people play in a communication exchange. Clearly, communication is a social act. At the same time, classification of those relevant properties of actors who occupy roles is desirable. Actor properties are the psychological dimensions of those who communicate.

It is unfortunate that the concept of role has had such narrow application in communication. Many theorists select a role concept such as "role involvement" or "gatekeeper," and force-fit the concepts to explain one of the conceptual islands which concerns us. This approach is unlikely to be successful. If role theory is correct, the actor concept permits the gathering of psychological properties, through the prism of roles, in order to understand the social dimension of communication.

Any communication role taxonomy must account for generally agreed upon observable activities when communication takes place. At the same time, a class of communication roles must interface with other classes of roles which interest scholars studying the social context. Organizational theorists are interested in such relational-role concepts as superior-subordinate, manager-employee, production and planning. Any communication role taxonomy ought to interface with an organizationally-based role taxonomy. The question then is, what communication roles characterize the distinction between supervisor roles and subordinate roles? For every organizational role there is a variable pattern of communication roles to be associated with it.

A more complete account requires the specification of a set of communication roles, and identification of a set of psychological properties which are associated with those communication roles. Such a terminological setting represents the possibility of reconstructing the immense knowledge we have about communication. Porter and Roberts observed, along with Guetzkow 11 years earlier, that communication in organizations requires a "clarifying perspective" which allows various pieces of research to fall into a whole, rather than remaining hidden."[13]

Cummings, Long and Lewis develop three dimensions of communication role categories--none of which are new inventions to the communication discipline, but categories that remain useful--based upon the act of people communicating with each other.[14] The dimensions are: source/receiver roles, work/person roles, and information exchange/solution-seeking/negotiation/behavior change roles. Justification for the selection of these roles is elsewhere, but each is briefly defined as follows (Figure 1):[15]

Place Figure 1 about here

---

1. A source role occurs when an individual produces symbols, oral or written. A receiver role occurs when an individual "consumes" symbols, oral or written.

2. A task role occurs when an individual is a source or receiver of symbols, the content of which is about work. A

socio-emotional role occurs when an individual is a source or receiver of symbols, the content of which is about person-related needs. These distinctions are not new, neither in communication theory or organizational behavior. However, they are new in the theoretic context outlined here.

3. The third dimension of roles concerns uses with which symbols are produced by humans. An information-giving role occurs when one makes "indicative" statements about their own experience.[16] An information-asking role occurs when one asks questions about other people's experiences. A problem-defining role occurs when an individual uses symbols to define the nature and scope of a problem.[17] A solution-trial role occurs when one uses symbols to represent possible solutions to problems, a kind of "solution fitting" activity.[18] A negotiation role occurs when an individual communicates to select one or more solutions over others. More meaningful, however, is the "style" of resolving conflicts.[19] A win-lose negotiating style occurs when one attempts to gain acceptance of a solution through exercise of power; a lose-lose negotiating style occurs when an individual attempts to gain acceptance of a solution through compromise, and a win-win negotiating style occurs when an individual attempts to gain acceptance of a solution which is best for all parties in the negotiation. Behavior change roles occurs when an individual communicates to modify the behavior of another in at least one of three ways.[20] The use of symbols representing rewards and punishments characterize

a compliance role of behavior change; identification role of behavior change occurs when symbols are used to indicate liking-disliking relationships between communicators, and an internalization role of behavior change occurs when symbols are used to persuade on the basis of logic and reason.

The Properties of Actors

Theorists may ask a variety of questions about individuals (actors) who occupy various communication roles. Sarbin and Allen describe traditional role theory examining such variables as an actor's perception of their role enactments, expectations, location demands, congruence and skill.[21] Similarly, Cummings, Long and Lewis examine actor properties such as: 1) the number of communication roles actors occupy; 2) the level of involvement actor's perceive in each communication role; 3) the amount of time actors spend in various communication roles; 4) the level of comfort actors experience in various communication roles; 5) the amount of skill for various communication roles actors perceive for themselves; and 6) the degree to which communication roles are accurately understood by actors.[22] These questions are but a sampling (not all-inclusive) of the kind of concerns that can be raised about actors in communication roles. The important aspect, now that the basic ingredients have been outlined, is to begin conceptualizing how actors' properties and communication roles fit together so as to integrate sociological

---

Place Figure 2 about here

---

and psychological orientations to communication in organization. Of course, the value of various theoretical orientations remains in their usefulness. Thus, an example of a communication role approach to organizational research seems in order.

Communication and Management Preference

Noted earlier, communication scholars rarely study such broadly conceived notions as management styles. In contrast, a large variety of management philosophies refer to communication activities among the identifiers of various approaches to managing.[23]

Porter and Roberts summarized 22 pieces of research representing the bulk of research prior to 1972, in which they argued we have little or no knowledge of:

> Whether communication in organizations could be characterized as emphasizing participative-type management differs in fundamental ways...from communication in more autocratically run organizations. Or...do organizations that contain different functional specializations actually exhibit different communication characteristics from organizations that encompass far fewer specializations?[24]

Links between functional specializations and types or kinds of managers are common in research. Identifiable styles of management are often behavioral properties attributed to managers and, thus, comprise a valuable beginning point for future research on differing management types.

Common questions asked about management preference center on what is the best way for a company to operate? Barrett and Bass report that of 2500 self-report inventories from middle

and upper managers in eight cultural areas during grid seminars show a great deal of similarity.[25] There is apparent agreement that a 9.9 management style (maximal concern with task and persons) is ideal.[26] Barrett and Bass report that the general results of several studies demonstrate (1) managers who "consult" are favored over those who "tell;" (2) managers' self perception of style doesn't match employees' perceptions, and that (3) managers who prefer to be receivers of one-way communication also have a propensity to share information and objectives (r=.82).

A popular research theme in management style is the task-person distinction emphasized by Mouton and Blake, and by McGregor's "Theory X-Theory Y" concepts.[27] Fiedler describes management styles in terms of a continuum. One end of the continuum is anchored by what Fiedler calls an authoritarian management style, indicative of individuals who are primarily motivated by explicit competition for material and tangible rewards in the work situation. The opposite end of Fiedler's continuum is anchored by a human welfare orientation to managing, representing individuals who prefer to be motivated by rewarding interpersonal relationships.[28]

The position regarding the value of a communication role taxonomy in understanding the organizational setting, suggests two general questions.

1. What communication roles best predict preferred management styles?

2. What properties of actors best predict preferred management styles?

A Communication Role Assessment Measure (CRAM) was developed to assess: (1) the amount of time a member of an organization spends in each of the communication roles; (2) the actor's self-perceived involvement in each communication role; (3) the actor's self-perceived skill in each communication role; (4) the actor's self-perceived trust in each communication role; (5) the actor's self-perceived comfort in each communication role, and (6) the amount of time spent interacting with superiors, subordinates and peers.[29]

Management preference was assessed through subtests in the Survey of Management Beliefs, developed by Michaelsen to measure Fiedler's management philosophies.[30] The SMB consists of 14 items allowing responses to indicate preference toward authoritarian and/or interpersonal relations types of management style. Michaelsen reports internal consistency reliability coefficient alphas for the SMB at .72 for interpersonal relations orientation and .82 for authoritarian management preference.

Since CRAM is a new instrument, reliability was important to establish. Validity of CRAM was assessed by its predictive validity with the two SMB measures as criterion variables. While hypothesis testing may be somewhat presumptuous and delimiting to the scope of concern here, the investigators did have some expectations. Porter and Roberts assessment cited earlier suggests a need to know all the significant communication role predictors of management style.[31] Specifically, Barrett and Bass suggest that task communication roles would best predict

authoritarian management preference, while socio-emotional communication roles would best predict interpersonal relations-oriented management preference.[32]

Method of Data Analysis

A voluntary sample of five units (N_t=130) of the National Guard were subjects for the study. Recent evaluations by the Department of the Army representatives indicate job skill and effectiveness exceed military specifications for the five units.[33] Subjects in the Guard unit work in various occupations, coming to their meetings on weekends and for summer encampments. Participants in the Army setting generally understand the authoritarian management style, yet in primarily vocational settings the Guard's operation may vary considerably from authoritarian to interpersonal relations-oriented styles.

The CRAM and SMB instruments were administered in a military classroom setting where subjects were given oral and written instructions for completing the instruments. Subjects were told the study's purpose was "to learn how employees feel about their jobs" and "what elements of communication are important or unimportant to them."

Factor Analysis of CRAM

At the outset of this study, the investigators were uncertain which set of variables would be most important in predicting management preference. Table 1 shows the matrix of 40 role variables included as part of the CRAM instrument. Due to limitations of the factor analytic model, the investigators chose not

Place Table 1 about here

to exceed 13 variable items for any single factor analysis. In addition, the possibility that the task/socio-emotional dichotomy of variables may overpower any other distinction (source/role, information exchange, solution-seeking, negotiation, or behavior change) was considered. Obviously if each variable were independent, factor analysis would not reduce the variables no matter how the investigators constructed the intercorrelation matrix. Thus, the following factor analyses of time in role variables were conducted:

Factor Analysis 1: Variables 1, 5, 9, 13, 17, 21, 25, 29, 33, 37.
Factor Analysis 2: Variables 2, 6, 10, 14, 18, 22, 26,30, 34, 38.
Factor Analysis 3: Variables 3, 7, 11, 15, 19, 23, 27,31, 35, 39.
Factor Analysis 4: Variables 4, 8, 12, 16, 20, 24, 28, 32, 26, 40.

While each of the above factor analyses were performed on independent intercorrelation matrices, the following were independent from each other but not from the first four factor analyses. Thus:

Factor Analysis 5: Variables 1, 2, 3, 4, 5, 6, 7, 8.
Factor Analysis 6: Variables 9, 10, 11, 12, 13, 14, 15, 16.
Factor Analysis 7: Variables 17, 18, 19, 20, 21, 22, 23, 24 25, 26, 27, 28.
Factor Analysis 8: Variables 29, 30, 31, 32, 33, 34, 35, 36, 38, 38, 39, 40.

Similarly, factor analyses on four actor variables and a behavioral measure of time spent interacting with superiors,

Place Table 2 about here

subordinates, and peers were performed (Table 2). The variables analyzed were as follows:

Factor Analysis 9: Variables 41, 45, 49, 53, 47, 61, 65.
Factor Analysis 10: Variables 42, 46, 50, 54, 58, 62, 66.
Factor Analysis 11: Variables 43, 47, 51, 55, 59, 63, 67.
Factor Analysis 12: Variables 44, 48, 52, 56, 60, 64, 68.

As before, the above factor analyses were performed on independent variable sets, but not independent of the following:

Factor Analysis 13: Variables 41, 42, 43, 44.
Factor Analysis 14: Variables 45, 46, 47, 48.
Factor Analysis 15: Variables 49, 50, 51, 52.
Factor Analysis 16: Variables 53, 54, 55, 56.
Factor Analysis 17: Variables 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68.

A .60- .40 'purity index" criterion was selected to determine items which best operationalize a factor.[34] While more sophisticated techniques might be used, (e.g., factor scores) the more traditional procedure was opted for since the investigators wished to retain interpretability of results in subsequent data analysis. The purpose of analyses was not to obtain a precise factor structure of the variables; rather, to remove redundancies in the subsequent data analysis.

Regression Analysis

Facing the 10 subjects per variable limitation, the investigators submitted the variables which operationalized the factors (summated raw scores) based on "pure" -loading items to a stepwise multiple regression analyses, using each of the two subtests of SMB separately as criterion variables. A regression equation was constructed for each factor analysis. Within each non-redundant set of factor analyses (Factor analyses 1-4, 5-8, 9-12, 13-17) a single regression equation was constructed. Finally, a single regression equation was constructed which distilled

the best predictors of management preference. At each stage, only those variables which contributed .05% of the variance and were significant predictors of management preference were retained for subsequent regression analysis. Regression analysis, then, was a pyramid of steps based on the procedure for factor analyzing the data, concluding with a single regression equation for each criterion variable. Since the regression analysis was a step-wise add technique, all variables were unique predictors, based on partialling out any correlation between each new predictor and the previously retained independent variable.

Results and Conclusions

Factor Analysis Results. The factor analysis results suggest support for the usefulness of the Communication Role Assessment Measure (CRAM); and the structural properties of the variables provide an empirical base for the theoretic justification of a role theory approach to communication.

Table 3 reports the variables (indicated by number; key to item variable identified is in Tables 1 and 2) which loaded according to the specified criteria along with the variance

---

Place Table 3 about here

---

explained by each factor analysis. Table 4 reports the communality estimates for each variable. Where the variable appeared in two factor analyses, both communalities were reported. Communality estimates were used as indicators of reliability

Place Table 4 about here

of the factor analyses.[35] Since no earlier research is available to estimate error variance of each item, reliability is tentatively equal to h^2.

Total variance of an item explained by a factor structure (t^2) is composed of $h^2+b^2+e^2$. Reliability estimates are normally based on h^2+b^2. Since specific variance (b^2) is not available, reliability is estimated as h^2, with error ($1-h^2$) containing both true error (e^2) and specific variance (b^2). The result is that reliability will be slightly underestimated. Averaged factor loadings were used as the coefficient of validity for measuring each factor.[36] Reliability for the variable items in all 17 factor analyses ranged from a low of .45 to a high of .997. Average validity with which the item variables represent their factors ranged from a low of .57 to a high of .99 (Table 3).

Regression Results. The predictor equation for an authoritarian management preference yielded a Multiple R (validity coefficient) of .49 (=3.41; df=11, 119, p 01). The amount of variance explained was 24%. Twelve predictor variables were introduced into the equation and eleven explained significant variance (Figure 3).

The predictor equation for an interpersonal relations oriented management preference yielded a Multiple R (validity coefficient) of .54 (F=3.95; df=12, 118; p .01). The amount of

variance explained was 29%. Of the twelve variables introduced into the predictor equation, all explained significant variance (Figure 4).

Figures 3 and 4 assist in conceptualizing the result by presenting the scale items which predict management preference in the order of the percent of variance explained in the regression equation. Only one variable, Solution-Seeking Role

---

Place Figures 3 and 4 about here

Factor 1, appears on both scales. All other factors uniquely predict their respective scales. However, since items appeared in two factor analyses, some items could appear more than once. Only five variables (34, 35, 53, 54, 56) were repeated in the list of predictors for authoritarian management preference; seven variables (10, 14, 42, 46, 48, 53, 54) were repeated in the list of predictors for interpersonal relations-orientation management preference. Eleven variables (41, 42, 44, 45, 46, 48, 50, 53, 54, 55. 56) appeared in both lists of predictors. Of the original set of communication role and actor variables (68), 24 (35.3%) of the properties were predictors of management preference. This does not mean that the remaining 64.7% of the variables are meaningless. They apparently are not useful, however, for these criterion variables for this population.

The investigators expected task-oriented communication role variables would predict an authoritarian management preference, although they did not predict it exclusively. Data analyses indicated that communication role variables explained the following amounts of significant variance: Task roles and actor variables explained 9.8%; socio-emotional roles and actor variables explained 6%; superior-subordinate-peer interaction explained 5%; solution-seeking roles explained 3.5%; behavior change roles explained .08%.

Task roles and actor variables explained the greatest amount of variance in an authoritarian management preference, representing at least partial evidence in support of this expectation. The greatest contributor was the per cent of time a person spent receiving task-related communication in the superior-subordinate-peer setting. It would seem employees who tended to communicate more with superiors and less with subordinates preferred an authoritarian management style. This factor accounted for 7% of the variance. An individual's self-perceived involvement, skill, trustworthiness, and comfort in source-task roles explained 2% of the variance. Task-related behavior change (identification and internalization) and solution-seeking while enacting a receiver role contributed .8%.

Initially there was surprise in finding the time spent in socio-emotional roles contributed to preference for an authoritarian management style. However, the socio-emotional roles were aimed at changing the behavior of others through identi-

fication and internalization, and may indicate strategies to change people's personal needs and goals integral to task achievement. Additionally, the behavior change role factor of identification included task as well as socio-emotional concerns (.08% of the variance). Superior-subordinate-peer interaction time was positively related to an authoritarian management style when the interaction was with superiors (2%), and, it was negatively related when the interaction was with peers (3%). Thus, it seems likely that a predisposition toward an authoritarian management philosophy would result in a greater desire to interact with one's superiors than with peers.

Finally, there was a significant negative relationship between involvement, skill, trustworthiness, and comfort in socio-emotional receiver roles and an authoritarian management preference (1%). This result confirms everyday experience, but has received little ink in communication research literature of the past.

Six factor variables accounted for 25% of the variance when predicting interpersonal relations-oriented management preference. Those variables were source-socio-emotional actor variable factor 1 (14%), role comfort factor 1 (4%), solution-seeking role factor 1 (3%), role skill factor 1 (2%), receiver-socio-emotional role factor 1 (1%), and source-socio-emotional role factor 3 (1%). The remaining variables accounted for approximately 4% of the variance.

The investigators expected socio-emotional communication roles would be significant predictors of interpersonal relations-oriented management preference. The data analyses supports this expectation. Socio-emotional communication roles and actor variables explained over 19% of the variance in this management preference. Involvement, skill, trustworthiness, and comfort in sending communication about personal needs and goals were the greatest contributors (14%). Additional variance was explained when enacting source-socio-emotional roles to change behavior (identification and internalization styles) and negotiation through compromise (1.01%). However, when receiver roles included compromise strategies for negotiation, a negative relationship occurred (1%), while receiving solutions to problems was positively related (.5%). Solution-seeking roles aimed at personal needs and goals positively contributed 3%, whereas negotiation roles through confrontation (.2%) and information asking and giving roles (.05%) negatively contributed. Role skill and role involvement contributed 2% and .8% respectively.

Only one task-related communication role variable was a significant predictor (.9%) in the final equation. The contribution was made through the enactment of source roles aimed at giving task-related information, and adds support to expectations of the research report.

Summary

Interaction with superiors is a strong predictor of an individuals preference for authoritarian types of management

styles. This especially appears accurate in reference to communication activities about task-related matters. Individuals who prefer an authoritarian management style feel a higher level of comfort in initiating communication with superiors than peers or subordinates. Furthermore, it appears that individuals who prefer an authoritarian management style tend to enact source-socio-emotional roles usually aimed at changing the behavior of peers. One might speculate that such roles are communication attempts to motivate, although no evidence yet exists for this.

Those who prefer an interpersonal relations orientation to management tend to exhibit high levels of self-perceived involvement, skill, trustworthiness and comfort as sources of information about personal needs and goals. In addition, they tend to perceive themselves highly skilled in all communication roles. Subsequent research is required to determine whether this self-perception is shared by others in the work environment.

The Communication Role Assessment Measure is an instrument designed to emphasize communication variables, not the more broadly conceived organizational variables. The terminology and concepts used are inherent to communication theories and research endeavors. The approach offers the potential for integration of scholarly concerns. This conceptual position allows one to ask research questions from psychological and sociological levels; thus, communication theory variables may be combined with variables in other disciplines to assist in defining research concerns.

This type of investigation offers an advantage not realized from some other conceptual frameworks. Recommendations made in the past have suggested that increases in "participation," "attitude homophily," and superiors' "attractiveness" are highly correlated with management preference. While this research has value and is interesting, it offers little precision in terms of describing the kinds of communication activity, the kinds of attitudinal objectives, and the kinds of supervisory attractiveness that predict management preference. This investigation attempts to move toward a greater degree of precision between communication variables and management preference through the framework of communication role enactment and actor properties.

It is not the conclusion of the investigators that communication role research is the "savior" of the communication discipline. On balance this investigation suggests communication role research is promising, but several concerns remain. For example, while R values of .49 and .52 (communication roles as predictors of authoritarian and interpersonal relations management preference respectively) are statistically significant, they are not an overwhelming accounting of variance explained. Several options are available to future investigators attempting to increase explanation: 1) Since the predictive validity of CRAM is directly tied to the criterion variable (SMB),perhaps improving how various management styles are operationalized would increase the variance explained by communication roles.

2) The addition of other predictor variables to the CRAM instrument may broaden explanation. 3) Turning to other scales, already developed, may shed additional light on the management preference of individuals. Of course, each option must be weighed with respect to its costs. How much variance must be explained before results are useful? What are the best ways to gather data in situations when organizations are generally hesitant to give employees release time for answering questionnaires? How large can an instrument be before subjects faint? All of these questions, and more, focus on practical concerns researchers must face in trying to explain a multi-dimensional concept such as communication.

Finally, the investigators conclude with encouragement for future research. This investigation supports the claim that communication role enactment and actor properties hold value in integrating traditional organizational communication concerns. Many interesting questions about how communication roles related to past research in communication apprehension, persuasion, negotiation, job satisfaction, networks, diffusion of information, decision making, employee selection and screening may form a foundation providing new research questions for the theorists and more useful direction for the practitioner.

Footnotes

1. F. W. Taylor, The Principles of Scientific Management (New York: Harper, 1923); H. Fayol, General and Industrial Management, trans. by J. A. Conbrough, (Geneva: International Management Institute, 1929); M. Weber, The Theory of Social and Economic Organization, trans. by A. M. Henderson and T. Parsons (New York: Free Press, 1947); R. Likert, The Human Organization (New York: McGraw-Hill, 1967); F. Herzberg, Work and the Nature of Man (Cleveland: World Publishing, 1966); F. E. Emery and E. L. Trist, "Socio-Technical Systems", Management Science Models and Techniques, Vol. 2 (London: Pergamon, 1960).

2. See: C. S. George, Jr., The History of Management Thought (Englewood Cliffs, N. J.: Prentice-Hall, 1968); D. A. Wren, The Evolution of Management Thought (New York: The Ronald Press, 1972). Both are excellent overviews of various management styles.

3. Examples of such dissertations are: G. T. Hunt, Communication, Institutional Satisfaction and Participative Decision-making at Three American Colleges, "Unpublished doctoral dissertation, Purdue University, 1972; S. E. Clement, "An Analytical Field Study of Selected Message and Feedback Variables in the Officer Hierarchy of the United States Army," Unpublished doctoral dissertation, Purdue University, 1973; J. B. Stull, "Openness in Supervisor-subordinate Communication: A Quasi-experimental Field Study, "Unpublished doctoral dissertation, Purdue University, 1975.

4. Examples as such articles are: P. K. Tompkins, "Management Communication in Rocket Research and Development," Communication Monographs, 44, 1977, pp. 1-26; J. B. Stull, "Rewards for Openness," Journal of Communication, 28, 1978, pp. 124-129; L. E. Browning, "A Grounded Organizational Communication Theory Derived From Qualitative Data," Communication Monographs, 45, 1978, pp. 93-109.

5. W. C. Redding, "Organizational Communication Theory and Ideology: An Overview," D. Nimmo (ed.), Communication Yearbook III (New Brunswick, N. J.: Transaction Books, 1979), pp. 309-341.

6. Examples of such critical analyses are: R. V. Farace and D. MacDonald, "New Directions In The Study of Organizational Communication," Personel Psychology, 27, 1974, pp. 1-19; K. H. Roberts, C. O'Reilly, III, C. Bretton and L. W. Porter, "Organization Theory and Organization Communications: A Communication Failure?" Human Relations, 27, 1974, pp. 501-524; F. Luthans, Organizational Behavior, New York: McGraw-Hill, 1973; G. M. Richetto, "Organizational Communication Theory and Research: An Overview," B. D. Ruben (ed.) Communication Yearbook I,(New Brunswick, N. J.: Transaction Books, 1977), pp. 331-345; Redding, 1979.

7. D. J. O'Keefe, "Logical Empiricism and the Study of Human Communication," Communication Monographs, 42, 1975, pp. 169-183.

8. M. L. Lewis, H. W. Cummings and L. W. Long, "A Functional Assessment Model of Oral Communication Skill in Organizations: Future Research Directions," Proceedings: The International Meeting of the American Business Communication Association, Seatle, 1979.

9. Luthans, 1973, attributes the comment to Gelleman, p. .

10. R. Rommetveit, Social Norms and Roles : Explorations in the Psychology of Enduring Social Pressure, (Minneapolis: University of Minnesota Press, 1955) p. 31.

11. T. Parsons, "An Outline of the Social System," in Theories of Society: Foundations of Modern Sociological Theories, (eds.) Parsons and other (New York: The Free Press, 1965) pp. 30-79.

12. E. Berne, Games People Play (New York: Grove Press, 1964).

13. L. W. Porter and R. H. Roberts, "Communication in Organizations," in Handbook of Industrial and Organizational Psychology (ed.) M. D. Dunnette (Chicago: Rand McNally, 1976) pp. 1639-1686; H. Guetzkow, "Communication in Organizations," in Handbook of Organizations (Chicago: Rand McNally, 1965) pp. 534-573.

14. H. W. Cummings, L. W. Long and M. L. Lewis, Communication Competency in Organizations (Dubuque, IA: Gorsuch Scarisbrick Publishers, in press).

15. Ibid; L. W. Long, "An Exploratory Study of Communication Roles as Predictors of Job Satisfaction and Management Preference," An unpublished dissertation, University of Oklahoma, 1979; M. L. Lewis, H. W. Cummings and L. W. Long, "Communication in Organizations: A Functional Perspective," A paper presented at the Speech Communication Association Convention, San Antonio, 1979.

16. H. W. Cummings and S. Renshaw,"SLCA:III: A Metatheorectic Approach to the Study of Language," Human Communication Research. 3, 4, 1979, pp. 291-300 .

17. J. P. Guilford, The Nature of Human Intelligence (New York: McGraw-Hill, 1967).

18. C. R. Berger, "Toward a Role Enactment of Persuasion," Speech Monographs, 39, 4, 1972, pp. 260-276.

19. W. J. McGuire, "The Nature of Attitudes and Attitude Change," in Handbook of Social Psychology Vol. III (2nd ed.), (eds.) G. Lindzey and E. Aronson (Reading, Mass.: Addison-Wesley, 1968) pp.

20. H. C. Kelman, "Compliance, Identification and Internalization: Three Processes of Opinion Change," Journal of Conflict Resolution, 2, 1958, pp. 51-60.

21. T. R. Sarbin and V. L. Allen, "Role Theory," in The Handbook of Social Psychology Vol. III (2nd. ed.), (eds.) G. Lindzey and E. Aronson (Reading: Mass.: Addison-Wesley, 1968) pp.

22. Cummings et. al., in press.

23. See E. McGregor, The Human Side of Enterprise (New York: McGraw-Hill, 1960); Likert, 1967; W. G. Scott and D. K. Hart, "The Moral Nature of Man in Organizations: A Comparative Analysis," Academy of Management Journal, 17, 1974, pp. 242-254; R. E. Miles, Theories of Management (New York: McGraw-Hill, 1975); D. Katz and R. L. Kahn, The Social Psychology of Organizations(2nd ed.) (New York: John Wiley and Sons, 1978).

24. L. W. Porter and R. H. Roberts, p. 1682.

25. G. V. Barrett and D. M. Bass, "Cross Cultural Issues in Industrial and Organizational Psychology," in Handbook of Industrial and Organizational Psychology (Chicago: Rand McNally, 1976) pp. 1639-1686.

26. J. M. Mouton and R. Blake, "Issues in Transnational Organizational Development," in Managing for Accomplishment (Boston: D. C. Heath, 1970) pp. 208-224.

27. Ibid; McGregor, 1960.

28. F. E. Fiedler, "Personality Motivational Systems and Behavior of High and Low LPC Persons," Technical Report: Office of Naval Research, 1970.

29. A copy of CRAM is available upon request from the authors.

30. L. K. Michaelsen, "Leader Orientation, Leader Behavior, Group Effectiveness and Situational Favorability: An Empirical Extension of the Contingency Model," Organizational Behavior and Human Performance, 9, 1973, pp. 226-245.

31. Porter and Roberts, 1976.

32. Barrett and Bass, 1976.

33. Headquarters: Training Management in Battalions, Washington, D. C.: Department of the Army, 1977.

34. J. P. Guilford and B. Fruchter, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill, 1978).

35. H. H. Harmon, Modern Factor Analysis (Chicago: The University of Chicago Press, 1976).

36. J. P. Guilford, Psychometric Methods, 2nd ed. (New York: McGraw-Hill, 1967).

FIGURE 1
COMMUNICATION ROLE TAXONOMY

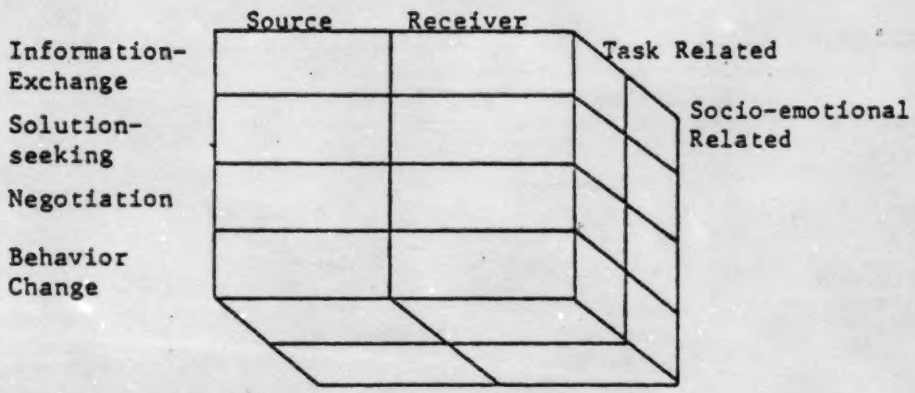

FIGURE 2: Communication Role Matrix

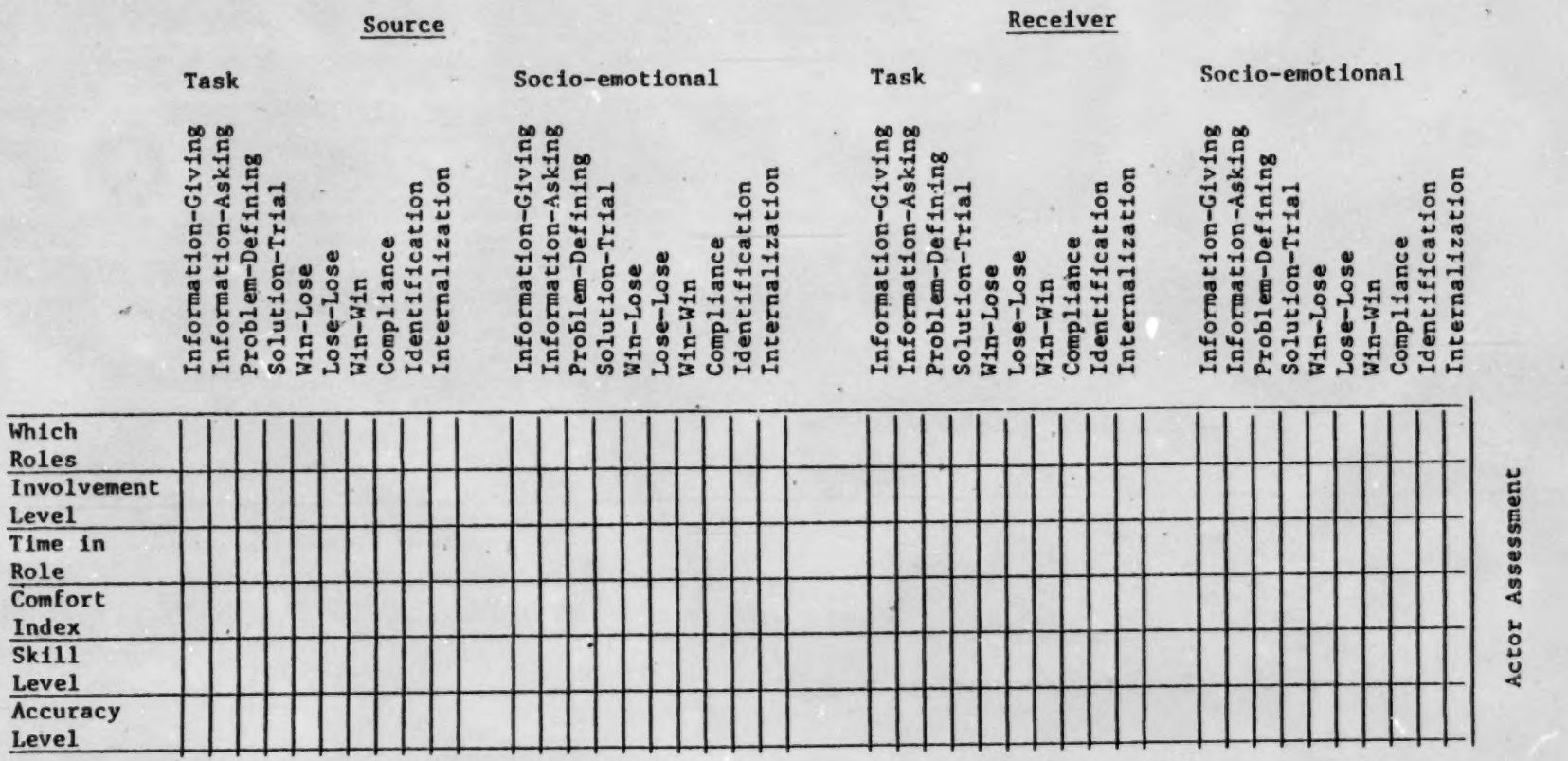

Figure 3

Scale Items Predicting Authoritarian Management Preference

Variable Type	Items	Variable Number	% of Variance	Standardized Beta Weight
Receiver-Task Actor	(interaction time with SUPERIORS)	59	7	.21
	(interaction time with SUBORDINATES)	63		
Source Socio-Emotional Role	I use friendship to change the behavior of others.	34	5	.15
	I use logic and reason to change the behavior of others.	38		
Solution-Seeking Role	I initiate discussion aimed at defining problems (socio-emotional).	10	3	.17
	I offer alternative solutions to problems (socio-emotional).	14		
	Others tend to initiate discussion with me aimed at defining problems (socio-emotional).	12		
Superior-Subordinate-Peer Interaction Time	Interaction with peers when sending socio-emotional information.	66	3	-.19
	Interaction with peers when receiving socio-emotional information.	68		
Superior-Subordinate-Peer Interaction Time	Interaction with superiors when sending socio-emotional information.	58	2	.11
	Interaction with superiors receiving socio-emotional information.	60		
Receiver Socio-Emotional Actor	I like to receive communication about personal needs and goals.	44	1	-.16
	Others feel I am an expert and often send me information about personal needs and goals.	48		
	Others feel I am trustworthy and often send me information about personal needs and goals	52		
	I am comfortable when receiving communication about personal needs and goals.	56		

Figure 3 continued

Variable Type	Items	Variable Number	% of Variance	Standardized Beta Weight
Source-Task Actor	I like to initiate communication about job-related activities.	41	2	.18
	Others feel I am an expert when I initiate communication about job-related activities.	45		
	Others feel I am trustworthy when I initiate communication about job-related activities.	49		
	I am comfortable when initiating communication about job-related activities.	53		
Receiver-Task Role	Others tend to use friendship to change my behavior.	35	.7	.08
	Others tend to use logic and reason to change my behavior.	39		
Solution-Seeking Role	I offer alternative solutions to problems (task).	13	.5	-.07
	Others tend to initiate discussion with me aimed at finding alternative solutions to problems (task).	15		
Receiver-Task Role	Others tend to ask me for information.	17	.1	.04
	Others tend to use reward and punishment to change my behavior.	31		
Behavior Change Role	I use friendship to change the behavior of others (task).	33	.08	.04
	Others tend to use friendship to change my behavior (task).	35		
	I use friendship to change the behavior of others (socio-emotional).	34		
	Others tend to use friendship to change my behavior (socio-emotional).	36		

Figure 4

Scale Items Predicting Interpersonal Relations-Oriented Management Preference

Variable Type	Items	Variable Number	% of Variance	Standardized Beta Weight
Source-Socio-Emotional Actor	I like to initiate communication about personal needs and goals.	42	14	.31
	Others feel I am an expert when I initiate communication about personal needs and goals.	46		
	Others feel I am trustworthy when I initiate communication about personal needs and goals.	50		
	I am comfortable when initiating communication about personal needs and goals.	54		
Role Comfort	I am comfortable when initiating communication about job-related activities	53	4	-.21
	I am comfortable when initiating communication about personal needs and goals.	54		
	I am comfortable when receiving communication about job-related activities.	55		
	I am comfortable when receiving communication about personal needs and goals.	56		
Solution-Seeking Role	I initiate discussion aimed at defining problems (socio-emotional).	10	3	.69
	I offer alternative solutions to problems (socio-emotional).	14		
	Others tend to initiate discussion with me aimed at defining problems (socio-emotional).	12		
Role Skill	Others feel I am an expert when I initiate communication about job-related activities.	45	2	-.16
	Others feel I am an expert when I initiate communication about personal needs and goals.	46		
	Others feel I am an expert and often send me information about job-related activities.	47		
	Others feel I am an expert and often send me information about personal needs and goals.	48		

Figure 4 continued

Variable Type	Items	Variable Number	% of Variance	Standardized Beta Weight
Receiver Socio-Emotional	When controversy arises, others tend to initiate confrontation with me in which one party or the other emerges as a winner.	20	1	-.06
	When controversy arises, others tend to initiate compromise with me where everyone loses a little.	24		
Role Involvement	I like to initiate communication about job-related activities.	41	.8	.16
	I like to initiate communication about personal needs and goals.	42		
	I like to receive information about job-related activities.	43		
	I like to receive information about personal needs and goals.	44		
Source-Socio-Emotional Role	I initiate discussion aimed at defining problems.	10	1	-.42
	I offer alternative solutions to problems.	14		
Source Task Role	I give information.	1	.9	.11
Receiver Socio-Emotional	Others tend to use reward and punishment to change my behavior.	32	.5	-.13
Negotiation Role	When controversy arises, others tend to initiate confrontation with me in which one party or the other emerges as a winner (task).	19	.2	-.06
	When controversy arises, others tend to initiate confrontation with me in which one party or the other emerges as a winner (socio-emotional).	20		
Information-Experiential Role	I ask for information (task).	5	.05	-.02
	Others tend to give me information (task).	3		
	I ask for information (socio-emotional).	8		
	Others tend to give me information (socio-emotional).	4		
Source Socio-Emotional Role	When controversy arises, I initiate compromise, even though everyone loses a little.	22	.01	-.01

TABLE 1

FACTOR ANALYSIS MATRIX FOR COMMUNICATION ROLES

	Source Role		Receiver Role	
	A1 Task	A2 Socio-emotional	B1 Task	B2 Socio-emotional
Informational-Experiential Role--C1	Information Giving (1)	Information Giving (2)	Information Giving (3)	Information Giving (4)
	Information Asking (5)	Information Asking (6)	Information Asking(7)	Information Asking (8)
8 variables				
Solution-Seeking Role--C2	Problem Defining (9)	Problem Defining (10)	Problem Defining (11)	Problem Defining (12)
	Solution Listing (13)	Solution Listing (14)	Solution Listing (15)	Solution Listing (16)
8 variables				
Negotiation Role--C3	Win-Lose (17)	Win-Lose (18)	Win-Lose (19)	Win-Lose (20)
	Lose-Lose (21)	Lose-Lose (22)	Lose-Lose (23)	Lose-Lose (24)
	Win-Win (25)	Win-Win (26)	Win-Win (27)	Win-Win (28)
12 variables				
Behavior Change Role--C4	Reward/Punishment (29)	Reward/Punishment (30)	Reward/Punishment (31)	Reward/Punishment (32)
	Identification (33)	Identification (34)	Identification (35)	Identification (36)
	Internalization (37)	Internalization (38)	Internalization (39)	Internalization (40)
12 variables				
	10 variables	10 variables	10 variables	10 variables

TABLE 2

FACTOR ANALYSIS MATRIX FOR COMMUNICATION ACTOR VARIABLES

	Source Role		Receiver Role	
	D1 Task	D2 Socio-emotional	E1 Task	E2 Socio-emotional
Role Involvement--F1 4 variables	Liking (41)	Liking (42)	Liking (43)	Liking (44)
Role Skill--F2 4 variables	Expert (45)	Expert (46)	Expert (47)	Expert (48)
Role Trustworthiness--F3 4 variables	Trust (49)	Trust (50)	Trust (51)	Trust (52)
Role Comfort--F4 4 variables	Comfort (53)	Comfort (54)	Comfort (55)	Comfort (56)
Superior-Subordinate-Peer Interaction--F5	Time with Supervisor (57)	Time with Supervisor (58)	Time with Supervisor (59)	Time with Supervisor (60)
	Time with Subordinate (61)	Time with Subordinate (62)	Time with Subordinate (63)	Time with Subordinate (64)
12 variables	Time with Peer (65)	Time with Peer (66)	Time with Peer (67)	Time with Peer (68)
	7 variables	7 variables	7 variables	7 variables

TABLE 3

RESULTS OF FACTOR ANALYSES AND VALIDITY ESTIMATES

	Factor 1		Factor 2		Factor 3		Factor 4		% of Vari Expl
	Variables	Validity	Variables	Validity	Variables	Validity	Variables	Validity	
FA 1	5, 25	.76	1	.82	9, 13	.77	33, 37	.71	59.6
FA 2	18, 26, 30	.77	34, 38	.74	10, 14	.81	22	.86	61.5
FA 3	35, 39	.75	19, 27	.62	11, 15	.71	17, 31	.75	62.4
FA4	20, 24	.75	36, 40	.85	12, 16	.84	32	.84	61.2
FA 5	5, 3, 8, 4	.73	1, 7	.77					52.8
FA 6	10, 14 12	.73	13, 15	.76	9, 11	.81			
FA 7	25, 27	.81	23	.76	17, 22	.70	19, 20	.73	61.3
FA 8	33, 34, 35, 36	.73	37, 38, 39, 40	.73	30, 32	.92	29, 31	.77	65t2
FA 9	41, 45 49, 53	.57	65	.83					54.1
FA 10	42, 46, 50,54	.75	66	.82					53.4
FA 11	43,47 51, 55	.75	59, 63	.88	67	.99			75.3
FA 12	44, 48 52, 56	.79	68	.84	60	.92			70.6
FA 13	41, 42 43, 44	.79							59.1
FA 14	45, 46 47, 48	.81							65.0
FA 15	49, 50 51, 52	.80							63.7
FA 16	53, 54 55, 56	.75							56.8
FA 17	66, 68	.73	63	.65	61, 62	.76	58, 60	.77	69.9